

Claims

1. Method for wrapping a round bale (3) pressed in a round bale press about at least its cylindrical surface area with an at least unilaterally adhesive film (12), wherein

5 a) the film (12) is pulled off from a film roll (11) in its entire width by means of a pulling-off device (6, 7),

b) a film rope (13) is formed from the film (12) during a predetermined space of time of the pulling-off operation according to step a),

10 c) the film rope (13) is introduced into the gap between the round bales (3) to be wrapped and a device (2) forming the circumferential press chamber wall,

d) the round bale (3) is hereafter set into rotation, so that the film rope (13) present in the gap is carried along, and

e) the round bale (3) continues to rotate until the desired number of film layers have formed on the surface area of the round bale.

15 2. Method according to claim 1,

characterized in that the film rope (13) is formed by gathering up the film (12) in its width.

3. Method according to claim 1,

20 characterized in that the film rope (13) is formed by twisting the film (12).

4. Method according to claim 1,

characterized in that shortly before the desired number of film layers have been wrapped on the round bale (3), another film rope (13) will be formed.

5. Method according to claim 4,

5 characterized in that the film (12), seen in the pulling-off direction, is cut in front of the film rope (3).

6. Method according to claim 1,

characterized in that pulling off of the film (12) from the film roll (11) ensues in the entire width thereof by guiding the film (12) through between
10 two rollers (6, 7) exerting a mutual pressure, at least one of them being driven.

7. Method according to claim 6,

characterized in that the cutting off of the film (12) ensues downstream of the pulling-off device (6, 7) by means of a cutting means (22) displaceable
15 transversely to the longitudinal direction of the film.

8. Method according to claim 1,

characterized in that after the method step e) the film is guided around the round bale with the round bale rotating, so that the entire round bale is completely enclosed by film webs overlapping one another.

20 9. Method according to claim 4,

characterized in that after the method step e) the film (12) is cut off, and the round bale (3), film-stabilized on its surface area, is outputted from the round bale press and is transferred to a wrapping table, on which the round bale (3) is completely wrapped with film.

25 10. Method according to any one of the preceding claims,

characterized in that the film (12) is an elastic PE film.

11. Method according to claim 8,

characterized in that the film (12) is a LLDPE (Linear Low Density PolyEthylene) film provided with an adhesive layer on its inner side.

5 12. Method according to claim 8,

characterized in that the film (12) consists of a material, which becomes adhesive under certain conditions.

13. Method according to one of the preceding claims,

10 characterized in that the film (12) is wider than the surface area of the round bale (3) and is wrapped around the surface area in such a manner that it projects at the two front faces of the round bale (3) by approximately the same amount, and is put against same at its latest by means of a downstream entire bale film wrapping.

15 14. Film wrapping device for a round bale (3) pressed in a round bale press, in particular round bales including garbage, comprising

- a film roll holding device (21) for holding the film roll (11),

- a pulling-off device (6, 7) for pulling off the film from the film roll (11),

- a film rope forming device (14, 19), by means of which in the pulled off film web (12) a film rope (13) can be produced over a certain film web length, and

20 - a cutting means (22) arranged downstream of the pulling-off device (6, 7) for cutting off the film (12)

15. Film wrapping device according to claim 14,

characterized in that the film roll holding device consists of a receptacle box (21) for receiving the film roll (11), said receptacle box (21) comprising on one side an outlet for the film (12) adapted approximately to the film width.

5 16. Film wrapping device according to claim 15,

characterized in that the receptacle box (21) comprises a plurality of rotatably mounted supporting rolls (18) the rotational axes of which are in parallel to the longitudinal axis of the film roll.

17. Film wrapping device according to claim 14,

10 characterized in that the film roll holding device comprises a tensioning device holding the film roll at its front side.

18. Film wrapping device according to claim 14, characterized in that the pulling-off means comprises at least two rollers (6, 7), between which the film is to be guided through, and at least one of them being driven.

15 19. Film wrapping device according to claim 18, characterized in that at least one roller (6) of the pair of rollers (6, 7) is non-rigidly mounted, so that the other roller gap is variable.

20 20. Film wrapping device according to claim 14, characterized in that the film rope forming device comprises film web construction means (19) bilaterally engaging the film edges and being variable in their mutual spacing.

21. Film wrapping device according to claim 20, characterized in that the film web construction means are rolls (19) mounted on pivot arms (14).

22. Film wrapping device according to claim 21, characterized in that the pivot arms (14) are mechanically coupled by a lever system (30, 31).

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23. Film wrapping device according to claim 14, characterized in that the film rope forming device comprises means causing the film (12) to twist about the longitudinal direction of the film web.

24. Film wrapping device according to claim 14, characterized in that the
5 cutting device (22) consists of a blade extending transversely over the film web and being pivotably mounted, so that it is movable in and out of engagement with the film.

25. Film wrapping device according to claim 14, characterized in that a control means is provided, which

10 - shortly before the desired number of film layers have been wrapped around the surface area of the round bale (3), activates the film rope forming device (14, 19) over a certain space of time, so that a film rope (13) is formed comprising a predetermined length again, and

15 - then activates the cutting means (22), so that, seen in the pulling-off direction of the film, the film (12) is cut in front of the film rope (13).

26. Round bale press for pressing pressable material, in particular agricultural harvest products such as straw, hay or grass, or garbage, for example, household or industrial garbage, comprising

20 - a press chamber into which the material is to be introduced and compressed under continuous rotation, so that a round bale (3) of pressed material can be produced, and

- a film wrapping device for the round bale (3) produced in the press chamber, comprising a film roll holding device (21),

25 • a pulling-off device (6, 7) for pulling the film off (12) from the film roll (11),

- a film rope forming device (14, 19), by means of which in the pulled-off film web (12) a film rope (13) can be produced over a certain film web length, and
- a cutting means (22) arranged downstream of the pulling-off device (6, 7) for cutting off the film (12).

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